

chat-window Documentation

The component is a comprehensive chat interface that provides message display, real-time input, custom icons, and automatic scrolling. It features a flexible message system, keyboard shortcuts, and responsive design for building interactive chat applications, customer support systems, and messaging interfaces.

How to use

Basic Usage

A chat window with message history, input area, and custom icons for sending messages and attachments.

```

<aava-chat-window
  [messages]="messages()"
  [placeholder]="placeholder"
  [disabled]="disabled"
  [rows]="rows"
  [icons]="chatIcons"
  (messageSent)="onMessageSent($event)"
  (iconClicked)="onIconClick($event)"
>
</aava-chat-window>

```

```

@ViewChild(AavaChatWindowComponent) chatWindow!: AavaChatWindowComponent;

```

```

messages = signal<ChatMessage[]>([]);
placeholder = "Type your message here...";
disabled = false;
rows = 3;

```

```

chatIcons: ChatWindowIcon[] = [
  {
    name: 'paperclip',
    slot: 'icon-start',
    size: 16,
    color: '#2563eb',
    click: () => this.onFileAttach()
  },
  {
    name: 'wand-sparkles',
    slot: 'icon-end',
    size: 16,
    color: '#2563eb',
    click: () => this.onMagicAction()
  },
  {
    name: 'send',
    slot: 'icon-end',
    size: 16,
    color: '#2563eb',
    click: () => this.onSendClick()
  }
];

```

```

onMessageSent(messageText: string) {
  // Add user message
  const userMessage: ChatMessage = {
    id: Date.now().toString(),
    text: messageText,
    timestamp: new Date().toLocaleString('en-US', {
      hour: 'numeric',
      minute: '2-digit',
      hour12: true
    }) + ' | Today',
    isUser: true
  };

```

```

this.messages.update(messages => [...messages, userMessage]);
// Add bot response after delay

```

```

setTimeout(() => {
  const botMessage: ChatMessage = {
    id: (Date.now() + 1).toString(),
    text: this.generateBotResponse(messageText),
    timestamp: new Date().toLocaleString('en-US', {
      hour: 'numeric',
      minute: '2-digit',
      hour12: true
    }) + ' | Today',
    isUser: false,
    avatar: '■'
  };

  this.messages.update(messages => [...messages, botMessage]);
}, 1000);
}

onIconClick(event: { icon: ChatWindowIcon, currentMessage: string }) {
  console.log('Icon clicked:', event.icon.name, 'Current message:', event.currentMessage);

  if (event.icon.name === 'send') {
    // User can add custom logic here before sending
    console.log('Send icon clicked, message:', event.currentMessage);
    // The send will be handled by the icon's click handler or manually trigger
  }
}

```

Features

Message Display

- Message History : Scrollable message container with user and bot messages
- Message Styling : Different styling for user and bot messages
- Timestamps : Automatic timestamp display for each message
- Auto-scroll : Automatic scrolling to the latest message
- Custom Avatars : Support for user avatars in messages

Input System

- Real-time Input : Live text input with placeholder support
- Keyboard Shortcuts : Enter to send, Shift+Enter for new line
- Custom Icons : Configurable icons for different actions
- Icon Slots : Start and end icon slots for flexible positioning
- Disabled State : Support for disabled input state

User Experience

- Responsive Design : Adapts to different screen sizes
- Smooth Scrolling : Smooth auto-scroll behavior
- Custom Scrollbars : Styled scrollbars for better UX
- Focus Management : Proper focus handling for accessibility
- Loading States : Support for loading and processing states

Configuration

- Flexible Messages : Support for different message types and content
- Icon Configuration : Customizable icons with click handlers
- Input Configuration : Configurable placeholder, rows, and styling
- Event Handling : Comprehensive event system for all interactions

API Reference

Inputs

Property	Type	Default	Description
messages	ChatMessage[]	[]	Array of chat messages to display
placeholder	string	'Type a message'	Placeholder text for the input field
disabled	boolean	false	Whether the chat window is disabled
icons	ChatWindowIcon[]	[]	Array of icons to display in the input area
rows	number	3	Number of rows for the textarea input

Outputs

Property	Type	Description
messageSent	EventEmitter<string>	Emitted when a message is sent
iconClicked	EventEmitter<{icon: ChatWindowIcon, currentMessage:string}>	Emitted when a chat window icon is clicked

Methods

Method	Description
triggerSend()	Public method to trigger message sending
getCurrentMessage()	Public method to get the current message text

Interfaces

CSS Classes

The component provides several CSS classes for styling:

Class Name	Description
.chat-window	Main chat window container
.chat-main	Main chat content wrapper
.messages-container	Scrollable messages area
.message-wrapper	Individual message wrapper
.user-message	User message styling
.bot-message	Bot message styling
.message-content	Message content container
.message-card	Message card styling
.message-text	Message text styling
.message-timestamp	Message timestamp styling
.input-area	Input area container

CSS Custom Properties

The component uses CSS custom properties for theming:

Property	Description
--surface-secondary	Secondary surface color for scrollbar
--border-color	Border color for input and scrollbar
--surface-background	Background color for input area
--text-tertiary	Tertiary text color for scrollbar
--text-secondary	Secondary text color for scrollbar
--border-radius-full	Full border radius for input

Best Practices

Message Management

- Unique IDs : Ensure each message has a unique identifier
- Timestamp Format : Use consistent timestamp formatting
- Message Length : Consider message length limits for better UX
- Loading States : Show typing indicators for better user experience

User Experience

- Auto-scroll : Always scroll to bottom for new messages
- Keyboard Support : Provide keyboard shortcuts for common actions

- Visual Feedback : Clear visual distinction between user and bot messages
- Responsive Design : Ensure chat works well on mobile devices

Performance

- Message Limits : Consider limiting displayed messages for performance
- Efficient Rendering : Use trackBy functions for large message lists
- Memory Management : Clean up old messages to prevent memory leaks
- Debounced Input : Consider debouncing input for better performance

Accessibility

- Screen Reader Support : Ensure messages are properly announced
- Keyboard Navigation : Full keyboard support for all interactions
- Focus Management : Proper focus handling for input and icons
- ARIA Labels : Provide appropriate ARIA labels for interactive elements

Accessibility Guidelines

Semantic Structure

The component provides proper semantic structure:

- Message Roles : Proper roles for user and bot messages
- Input Labels : Clear labels for input fields
- Icon Descriptions : Proper descriptions for interactive icons
- Focus Management : Logical focus order through chat elements

Screen Reader Support

- Message Announcements : Clear announcements of new messages
- Input Feedback : Proper feedback for input actions
- Icon Descriptions : Descriptive labels for all icons
- Status Updates : Clear status updates for loading and sending

Keyboard Navigation

- Tab Order : Logical tab order through chat elements
- Enter Key : Enter key for sending messages
- Icon Activation : Keyboard activation for all icons
- Focus Indicators : Clear focus indicators for keyboard users

Color and Contrast

- WCAG Compliance : All text and interactive elements meet WCAG AA contrast ratios
- High Contrast Mode : Component works with system high contrast settings
- Color Independence : Information is not conveyed by color alone
- Visual Hierarchy : Clear visual distinction between message types

Responsive Behavior

Mobile Adaptations

The chat window automatically adapts to mobile screens:

- Touch Optimization : Optimized touch targets for mobile interaction
- Keyboard Handling : Proper mobile keyboard behavior
- Viewport Adaptation : Adapts to different mobile viewport sizes
- Scroll Behavior : Smooth scrolling on mobile devices

Breakpoint Behavior

- Desktop ($>768\text{px}$) : Full chat interface with all features
- Mobile ($\leq 768\text{px}$) : Compact layout with optimized spacing
- Input Sizing : Responsive input area sizing
- Icon Sizing : Appropriate icon sizes for different screens

Content Considerations

- Message Length : Messages adapt to different screen widths
- Input Height : Input area adjusts based on content
- Scroll Performance : Optimized scrolling for mobile devices
- Touch Targets : Adequate touch target sizes for mobile